

I Claim:

1. A method for producing 2-oxoglutaramate, comprising the step of incubating bacteria of the genera *Providencia* or *Proteus*, or an active biocatalyst derived therefrom, in an incubation solution comprising at least about 25mM L-glutamine.
2. The method of claim 1, in which the incubation solution comprises at least about 100mM L-glutamine.
3. The method of claim 1, in which the incubation solution comprises a buffer and catalase and has a pH ranging from 6.5 to 8.5.
4. The method of claim 1, in which the bacteria are one of *Providencia* sp. PCM-1298 and *Providencia* sp. PCM-1270.
5. The method of claim 1, in which L-glutamine is added to the incubation solution during incubation over a time period either in two or more aliquots or as a steady trickle.
6. The method of claim 1, further comprising the step of stopping the incubation by either killing the bacteria or removing the bacteria from the incubation solution.
7. The method of claim 1, further comprising the step of purifying the 2-oxoglutaramate by ion exchange chromatography.

8. The method of claim 1, further comprising the step of purifying the 2-oxoglutaramate by precipitation.
9. The method of claim 1, in which the incubation solution is a slurry comprising solid L-glutamine.
10. The method of claim 9, in which the slurry comprises up to about 250 g/L of solid L-glutamine.
11. The method of claim 1 in which the bacteria is *Proteus mirabilis*.
12. The method of claim 11 in which the bacteria is *Proteus mirabilis* strain PCM-1353.
13. The method of claim 1 in which the active biocatalyst is immobilized on a substrate.
14. A method for producing 2-oxoglutaramate, comprising the steps of:

- a) providing an incubation solution slurry comprising a buffer and solid L-glutamine and having a pH of from about 7.0 to about 8.0;

- b) adding to the incubation solution slurry a resuspended wet cell pellet collected from one of a *Providencia* culture and a *Proteus* culture; and

c) incubating the slurry to convert L-glutamine to 2-oxoglutaramic acid.

15. The method of claim 14, in which the slurry further comprises catalase.

16. A reaction mixture for producing 2-oxoglutaramate, comprising *Providencia* or *Proteus* bacteria or an active biocatalyst derived therefrom and at least about 25mM L-glutamine.

17. The reaction mixture of claim 16, in which the bacteria are one of *Providencia* sp. PCM-1298 and *Providencia* sp. PCM-1270.

18. The reaction mixture of claim 16 in which the bacteria is *Proteus mirabilis*.

19. The reaction mixture of claim 18 in which the bacteria is *Proteus mirabilis* strain PCM-1353.

20. The reaction mixture of claim 16, comprising a near-saturation amount of L-glutamine.

21. The reaction mixture of claim 16, comprising a slurry of solid L-glutamine.

22. The reaction mixture of claim 21, in which the slurry comprises up to about 250g/L solid L-glutamine.

23. The reaction mixture of claim 16, further comprising catalase.

24. The reaction mixture of claim 16, comprising an active biocatalyst derived from *Providencia* or *Proteus* bacteria that is immobilized on a substrate.

25. The reaction mixture of claim 16, comprising at least about 1% w/v, wet cell pellet mass, of the bacteria cells.

26. The reaction mixture of claim 21, comprising from 1% by weight to 50% by weight bacteria (wet cell pellet mass), 50mM TRIS-HCl (pH 7.0 to 8.0), catalase and from 0.32% by weight to 25% by weight L-glutamine.

27. A composition comprising *Providencia* or *Proteus* bacteria and at least about 20mM 2-oxoglutarate.

28. The composition of claim 27, in which the bacteria are one of *Providencia* sp. PCM-1298, and *Providencia* sp. PCM-1270.

29. The composition of claim 27 in which the bacteria is *Proteus mirabilis*.

30. The composition of claim 29 in which the bacteria is *Proteus mirabilis* strain PCM-1353.